

>AB098335 ACCESSION:AB098335 NID: gi 27263189 dbj AB098335.1 Homo
 sapiens SCN1A mRNA for Voltage-gated sodium channel alpha
 1 subunit, complete cds
 Length = 5946

Score = 3965 bits (10170), Expect = 0.0
 Identities = 1979/2009 (99%), Positives = 1979/2009 (99%), Gaps = 0/2009 (0%)
 Frame = +1

Query: 1 MEQTVLVPPGPDSENFNFTRESLAAIERRIAEEKAKNPKPKDKKDDDENGPKPNSDLEAGKN 60
 MEQTVLVPPGPDSENFNFTRESLAAIERRIAEEKAKNPKPKDKKDDDENGPKPNSDLEAGKN
 Sbjct: 1 MEQTVLVPPGPDSENFNFTRESLAAIERRIAEEKAKNPKPKDKKDDDENGPKPNSDLEAGKN 180

Query: 61 LPFIYGDIPPEMVSEPLEDLDPPYINKKTFIVLNKGKAI FRFSATSALYILT PFNPLRKI 120
 LPFIYGDIPPEMVSEPLEDLDPPYINKKTFIVLNKGKAI FRFSATSALYILT PFNPLRKI
 Sbjct: 181 LPFIYGDIPPEMVSEPLEDLDPPYINKKTFIVLNKGKAI FRFSATSALYILT PFNPLRKI 360

Query: 121 AIKILVHSLF SMLIMCTILTNCVFMTMSNPPDWTKNVEYTF TGIYTFESLIKII ARGFCL 180
 AIKILVHSLF SMLIMCTILTNCVFMTMSNPPDWTKNVEYTF TGIYTFESLIKII ARGFCL
 Sbjct: 361 AIKILVHSLF SMLIMCTILTNCVFMTMSNPPDWTKNVEYTF TGIYTFESLIKII ARGFCL 540

Query: 181 EDFTF LRD PWNWLDFTVITFAYVTEFVD LGNV SALRTFRVLRALKTISVIPGLKTIVGAL 240
 EDFTF LRD PWNWLDFTVITFAYVTEFVD LGNV SALRTFRVLRALKTISVIPGLKTIVGAL
 Sbjct: 541 EDFTF LRD PWNWLDFTVITFAYVTEFVD LGNV SALRTFRVLRALKTISVIPGLKTIVGAL 720

Query: 241 IQSVKKLS DVMILTVFCLSVFALIGLQLFMGNLRNKCIQWPPTNASLEEHSIEKNITVNY 300
 IQSVKKLS DVMILTVFCLSVFALIGLQLFMGNLRNKCIQWPPTNASLEEHSIEKNITVNY
 Sbjct: 721 IQSVKKLS DVMILTVFCLSVFALIGLQLFMGNLRNKCIQWPPTNASLEEHSIEKNITVNY 900

Query: 301 NGTLINETVFEFDWKS YIQDSRYHYFLEGFLDALLCGNSSDAGQCPEGYMCVKAGRNP NY 360
 NGTLINETVFEFDWKS YIQDSRYHYFLEGFLDALLCGNSSDAGQCPEGYMCVKAGRNP NY
 Sbjct: 901 NGTLINETVFEFDWKS YIQDSRYHYFLEGFLDALLCGNSSDAGQCPEGYMCVKAGRNP NY 1080

Query: 361 GYTSFDTF SWAFLSLFRLMTQDFWENLYQLTLRAAGKTYMIF FVLVIFLGSFYLINLILA 420
 GYTSFDTF SWAFLSLFRLMTQDFWENLYQLTLRAAGKTYMIF FVLVIFLGSFYLINLILA
 Sbjct: 1081 GYTSFDTF SWAFLSLFRLMTQDFWENLYQLTLRAAGKTYMIF FVLVIFLGSFYLINLILA 1260

Query: 421 VVAMAYEEQNQATLEEA EQKEAEFQQMIEQLKKQQEAAQQAATATASEHSREPSAAGR LS 480
 VVAMAYEEQNQATLEEA EQKEAEFQQMIEQLKKQQEAAQQAATATASEHSREPSAAGR LS
 Sbjct: 1261 VVAMAYEEQNQATLEEA EQKEAEFQQMIEQLKKQQEAAQQAATATASEHSREPSAAGR LS 1440

Query: 481 DSSSEASKLSSKSAKERRNR RKRKQKEQSGGEEKDEDEFQKSESEDSIRRKGFRFSIEG 540
 DSSSEASKLSSKSAKERRNR RKRKQKEQSGGEEKDEDEFQKSESEDSIRRKGFRFSIEG
 Sbjct: 1441 DSSSEASKLSSKSAKERRNR RKRKQKEQSGGEEKDEDEFQKSESEDSIRRKGFRFSIEG 1620

Query: 541 NRLTYEKRYSSPHQSLLSIRGSLFSPRRNSRTSLFSFRGRAKDV GSENFADDEHSTFED 600
 NRLTYEKRYSSPHQSLLSIRGSLFSPRRNSRTSLFSFRGRAKDV GSENFADDEHSTFED
 Sbjct: 1621 NRLTYEKRYSSPHQSLLSIRGSLFSPRRNSRTSLFSFRGRAKDV GSENFADDEHSTFED 1800

Query: 601 NESRRDSL FVPRRHGERRNSNLSQTSRSSRMLAVFPANGKMHSTVDCNGVVSLVGGPSVP 660
 NESRRDSL FVPRRHGERRNSNLSQTSRSSRMLAVFPANGKMHSTVDCNGVVSL
 Sbjct: 1801 NESRRDSL FVPRRHGERRNSNLSQTSRSSRMLAVFPANGKMHSTVDCNGVVSL----- 1959

Query: 661 TSPVGQLLPEVIIDKPATDDNGTTTETEMRKRSSSFHVSMDFLEDPSQRQRAMS IASIL 720
 GTTTETEMRKRSSSFHVSMDFLEDPSQRQRAMS IASIL
 Sbjct: 1960 -----GTTTETEMRKRSSSFHVSMDFLEDPSQRQRAMS IASIL 2076

Query: 721 TNTVEELEESRQKCPPCWYKFSNIFLIWDCSPYWLKVHVNLVVMDFVLDLITICIVL 780
TNTVEELEESRQKCPPCWYKFSNIFLIWDCSPYWLKVHVNLVVMDFVLDLITICIVL
Sbjct: 2077 TNTVEELEESRQKCPPCWYKFSNIFLIWDCSPYWLKVHVNLVVMDFVLDLITICIVL 2256

Query: 781 NTLFMAMEHYPMTHFNVLTVGNLVFTGIFTAEMFLKIIAMDPYFFFQEGWNIFDGFIV 840
NTLFMAMEHYPMTHFNVLTVGNLVFTGIFTAEMFLKIIAMDPYFFFQEGWNIFDGFIV
Sbjct: 2257 NTLFMAMEHYPMTHFNVLTVGNLVFTGIFTAEMFLKIIAMDPYFFFQEGWNIFDGFIV 2436

Query: 841 TLSLVELGLANVEGLSVLRSFRLLRVFKLAKSWPTLNMLIKIIGNSVGALGNLTLVLAI 900
TLSLVELGLANVEGLSVLRSFRLLRVFKLAKSWPTLNMLIKIIGNSVGALGNLTLVLAI
Sbjct: 2437 TLSLVELGLANVEGLSVLRSFRLLRVFKLAKSWPTLNMLIKIIGNSVGALGNLTLVLAI 2616

Query: 901 VFIFAVVGMQLFGKSYKDCVCKIASDCQLPRWHMNDFFHSFLIVFRVLCGEWIETMWDCM 960
VFIFAVVGMQLFGKSYKDCVCKIASDCQLPRWHMNDFFHSFLIVFRVLCGEWIETMWDCM
Sbjct: 2617 VFIFAVVGMQLFGKSYKDCVCKIASDCQLPRWHMNDFFHSFLIVFRVLCGEWIETMWDCM 2796

Query: 961 EVAGQAMCLTVFMMVMVIGNLVVLNLFALLXSSFSADNLAATDDDNEMNNLQIAVDRMH 1020
EVAGQAMCLTVFMMVMVIGNLVVLNLFALL SSFSADNLAATDDDNEMNNLQIAVDRMH
Sbjct: 2797 EVAGQAMCLTVFMMVMVIGNLVVLNLFALLXSSFSADNLAATDDDNEMNNLQIAVDRMH 2976

Query: 1021 KGVAYVVKRIYEFIQQSFIKQKILDEIKPLDDLNNKKDSCMSNHTXEIGKDL DYLDVN 1080
KGVAYVVKRIYEFIQQSFIKQKILDEIKPLDDLNNKKDSCMSNHT EIGKDL DYLDVN
Sbjct: 2977 KGVAYVVKRIYEFIQQSFIKQKILDEIKPLDDLNNKKDSCMSNHTXEIGKDL DYLDVN 3156

Query: 1081 GTTSGIGTGSSVEKYIIDESDYMSFINNPSLTVTVPIAVGESDFENLNTEDFSSES DLEE 1140
GTTSGIGTGSSVEKYIIDESDYMSFINNPSLTVTVPIAVGESDFENLNTEDFSSES DLEE
Sbjct: 3157 GTTSGIGTGSSVEKYIIDESDYMSFINNPSLTVTVPIAVGESDFENLNTEDFSSES DLEE 3336

Query: 1141 SKEKLNSSSSSSEGSTVDIGAPVEEQPVVEPEETLEPEACFTEGCVQRFKCCQINVEEGR 1200
SKEKLNSSSSSSEGSTVDIGAPVEEQPVVEPEETLEPEACFTEGCVQRFKCCQINVEEGR
Sbjct: 3337 SKEKLNSSSSSSEGSTVDIGAPVEEQPVVEPEETLEPEACFTEGCVQRFKCCQINVEEGR 3516

Query: 1201 GKQWWNLRRTCFRIVEHNWFETFI VFMILLSSGALAFEDIYIDQRKTIKTMLEYADKVFT 1260
GKQWWNLRRTCFRIVEHNWFETFI VFMILLSSGALAFEDIYIDQRKTIKTMLEYADKVFT
Sbjct: 3517 GKQWWNLRRTCFRIVEHNWFETFI VFMILLSSGALAFEDIYIDQRKTIKTMLEYADKVFT 3696

Query: 1261 YIFILEMLLKWVAYGYQTYFTNAWCWLD FLIVDVSLVSLTANALGYSELGAIKSLRTLRA 1320
YIFILEMLLKWVAYGYQTYFTNAWCWLD FLIVDVSLVSLTANALGYSELGAIKSLRTLRA
Sbjct: 3697 YIFILEMLLKWVAYGYQTYFTNAWCWLD FLIVDVSLVSLTANALGYSELGAIKSLRTLRA 3876

Query: 1321 LRPLRALSRFEGMRVVVNALLGAIPSIMNVLLVCLIFWLIFSIMGVNLFAGKFYHCINTT 1380
LRPLRALSRFEGMRVVVNALLGAIPSIMNVLLVCLIFWLIFSIMGVNLFAGKFYHCINTT
Sbjct: 3877 LRPLRALSRFEGMRVVVNALLGAIPSIMNVLLVCLIFWLIFSIMGVNLFAGKFYHCINTT 4056

Query: 1381 TGDRFDIEDVNNHTDCLKLIERNETARWKNVKNFNDNVGFGYLSLLQVATFKGWM DIMYA 1440
TGDRFDIEDVNNHTDCLKLIERNETARWKNVKNFNDNVGFGYLSLLQVATFKGWM DIMYA
Sbjct: 4057 TGDRFDIEDVNNHTDCLKLIERNETARWKNVKNFNDNVGFGYLSLLQVATFKGWM DIMYA 4236

Query: 1441 AVDSRNVELQPKYEEESLYMYLYFVIFIIFGSFFTLNLFIGVII DNFNQQKKKFGGQDIFM 1500
AVDSRNVELQPKYEEESLYMYLYFVIFIIFGSFFTLNLFIGVII DNFNQQKKKFGGQDIFM
Sbjct: 4237 AVDSRNVELQPKYEEESLYMYLYFVIFIIFGSFFTLNLFIGVII DNFNQQKKKFGGQDIFM 4416

Query: 1501 TEEQKKYYNAMKKLGSKKPQKPIPRPGNKFQGMVDFVTRQVFDISIMILICLNMVTMMV 1560
TEEQKKYYNAMKKLGSKKPQKPIPRPGNKFQGMVDFVTRQVFDISIMILICLNMVTMMV
Sbjct: 4417 TEEQKKYYNAMKKLGSKKPQKPIPRPGNKFQGMVDFVTRQVFDISIMILICLNMVTMMV 4596

Query: 1561 ETDDQSEYVTTILSRINLVFIVLFTGECVLKLISLRHYFTIGWNIFDFVWVILSIVGMF 1620
 ETDDQSEYVTTILSRINLVFIVLFTGECVLKLISLRHYFTIGWNIFDFVWVILSIVGMF
 Sbjct: 4597 ETDDQSEYVTTILSRINLVFIVLFTGECVLKLISLRHYFTIGWNIFDFVWVILSIVGMF 4776

Query: 1621 LAELIEKYFVSPTLFRVIRLARIGRILRLIKGAKGIRTLLFALMMSLPALFNIGLLLFLV 1680
 LAELIEKYFVSPTLFRVIRLARIGRILRLIKGAKGIRTLLFALMMSLPALFNIGLLLFLV
 Sbjct: 4777 LAELIEKYFVSPTLFRVIRLARIGRILRLIKGAKGIRTLLFALMMSLPALFNIGLLLFLV 4956

Query: 1681 MFIYAIFGMSNFAYVKREVGIDDMFNFETFGNSMICLFQITTSAGWDGLLAPILNSKPPD 1740
 MFIYAIFGMSNFAYVKREVGIDDMFNFETFGNSMICLFQITTSAGWDGLLAPILNSKPPD
 Sbjct: 4957 MFIYAIFGMSNFAYVKREVGIDDMFNFETFGNSMICLFQITTSAGWDGLLAPILNSKPPD 5136

Query: 1741 CDPNKVNPSSVKGDCGNPSVGIFFFVSYIIISFLVVNMYIAVILENFSVATEESAEP 1800
 CDPNKVNPSSVKGDCGNPSVGIFFFVSYIIISFLVVNMYIAVILENFSVATEESAEP
 Sbjct: 5137 CDPNKVNPSSVKGDCGNPSVGIFFFVSYIIISFLVVNMYIAVILENFSVATEESAEP 5316

Query: 1801 SEDDFEMFYEVWEKFDPDATQFMFEKLSQFAAALEPPLNLPQPNKLQLIAMDLPMVSGD 1860
 SEDDFEMFYEVWEKFDPDATQFMFEKLSQFAAALEPPLNLPQPNKLQLIAMDLPMVSGD
 Sbjct: 5317 SEDDFEMFYEVWEKFDPDATQFMFEKLSQFAAALEPPLNLPQPNKLQLIAMDLPMVSGD 5496

Query: 1861 RIHCLDILFAFTKRVLGESGEMDALRIQMEERFMASNP SKVSYQPITTTTLKRKQEEVSAV 1920
 RIHCLDILFAFTKRVLGESGEMDALRIQMEERFMASNP SKVSYQPITTTTLKRKQEEVSAV
 Sbjct: 5497 RIHCLDILFAFTKRVLGESGEMDALRIQMEERFMASNP SKVSYQPITTTTLKRKQEEVSAV 5676

Query: 1921 IIQRAYRRHLLKRTVKQASFTYNKNKIKGGANLLIKEDMIIDRINENSITEKDTLTMSTA 1980
 IIQRAYRRHLLKRTVKQASFTYNKNKIKGGANLLIKEDMIIDRINENSITEKDTLTMSTA
 Sbjct: 5677 IIQRAYRRHLLKRTVKQASFTYNKNKIKGGANLLIKEDMIIDRINENSITEKDTLTMSTA 5856

Query: 1981 ACPPSYDRVTKPIVEKHEQEGKDEKAKGK 2009
 ACPPSYDRVTKPIVEKHEQEGKDEKAKGK
 Sbjct: 5857 ACPPSYDRVTKPIVEKHEQEGKDEKAKGK 5943



Entrez

PubMed

Nucleotide

Protein

Genome

Structure

PMC

Taxonomy

Books

 Search for

Go

Clear

Limits

Preview/Index

History

Clipboard

Details

Display

default

Show:

20

Send to

File

Get Subsequence

Features

☐ 1: [AB098335](#). Homo sapiens SCN1...[gi:27263189]

Links

LOCUS AB098335 5946 bp mRNA linear PRI 20-DEC-2002

DEFINITION Homo sapiens SCN1A mRNA for Voltage-gated sodium channel alpha 1 subunit, complete cds.

ACCESSION AB098335

VERSION AB098335.1 GI:27263189

KEYWORDS .

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1

AUTHORS Ouchida,M. and Ohmori,I.

TITLE Isoforms of human sodium channel SCN1A gene

JOURNAL Published Only in Database (2002)

REFERENCE 2 (bases 1 to 5946)

AUTHORS Ouchida,M. and Ohmori,I.

TITLE Direct Submission

JOURNAL Submitted (18-DEC-2002) Mamoru Ouchida, Okayama University, Graduate School of Medicine and Dentistry, Department of Molecular Genetics; Shikata-cho 2-5-1, Okayama-shi, Okayama 700-8558, Japan (E-mail:ouchidam@md.okayama-u.ac.jp, Tel:81-86-235-7379, Fax:81-86-235-7383)

FEATURES

Location/Qualifiers

source

1..5946

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/chromosome="2"

/map="2q24"

/tissue_type="normal brain"

/note="Codon 1039 is ACA (Thr) or GCA (Ala) as polymorphism"

gene

1..5946

/gene="SCN1A"

CDS

1..5946

/gene="SCN1A"

/note="alternative splicing:see also Accession number AB093549 and AB093548"

/codon_start=1

/product="Voltage-gated sodium channel alpha 1 subunit"

/protein_id="BAC45228.1"

/db_xref="GI:27263190"

 /translation="MEQTVLVPPGPDSFNFFFTRESLAAIERRIAEKAKNPKPKDD
DENGPKPNSDLEAGKNLPFIYGDIPPEMVSEPLEDLPYYINKKTFIVLNKGKAIKFRF
SATSALYILTFFNPLRKIAIKILVHSLFSMLIMCTILTNCVFMTMSNPPDWTKNVEYT
FTGIYTFESLIKIIARGFCLEDFTLRDPWNWLDFTVITFAYVTEFVDLGNVSALRTF
RVLRALKTISVIPGLKTIVGALIQSVKKLSVDMILTVFCLSVFALIGLQLFMGNLRNK

CIQWPPTNASLEEHSIEKNITVNYNGTLINETVFEFDWKSIIQDSRYHYFLEGFLDAL
 LCGNSSDAGQCPEGYMCVKAGRPNPNYGYTSFDTFSWAFLSLFRLMTQDFWENLYQLTL
 RAAGKTYMIFFLVIFLGSFYLINLILAVVAMAYEEQNQATLEEAQEKEAEFQQMIEQ
 LKKQQEAAQQAATATASEHSREPSAAGRLSDSSSEASKLSSKS AKERRNRKRKQKE
 QSGGEEKDEDEFQKSESEDSIRRKGFRTSIEGNRLTYEKRYSSPHQSLLSIRGSLFSP
 RRNSRTSLFSFRGRAKDVGSSENFADDEHSTFEDNESRRDLSLFPVRRHGERRNSNLSQ
 TSRSSRMLAVFPANGKMHSTVDCNGVVSGLGTTTETEMRKRSSSFHVSMDFLEDPSQR
 QRAMSIASILTNTVEELEESRQKPCPCWYKFSNIFLIWDCSPYWLKVKHVVNLVVMDF
 FVDLAITICIVLNTLFMAMEHYPMTDHFNNVLTGVLNLTGIFTAEMFLKIIAMDPYY
 YFQEGWNI FDGFIVTSLSLVELGLANVEGLSVLRSFRLLRVFKLAKSWPTLNMLIKIIG
 NSVGALGNLTLVLAIIVFIFAVVGMQLFGKSYKDCVCKIASDCQLPRWHMNDFFHSFL
 IVFRLCGEWIETMWDCEVAGQAMCLTVFMMVMVIGNLVVLNLFALLSSFSADNL
 AATDDDNEMNQLIAVDRMHKGVAYVKRKIYEFIQQSFIRKQKILDEIKPLDDLNNKK
 DSCMSNHTTEIGKDL DYLDVNGTTSIGIGTGSSVEKYIIDESDYMSFINNPSLTVTVP
 IAVGESDFENLTEDFSSES DLEESKEKLNESSSSSEGSTVDIGAPVEEQPVVEPEET
 LEPEACFTEGCVQRFKCCQINVEEGRGKQWWNLRRTCFRIVEHNWFETFI VFMILLSS
 GALAFEDIYIDQRKTIKTMLEYADKVFTYIFILEMLLKWVAYGYQTYFTNAWCWLDL
 IVDVSLVSLTANALGYSELGAIKSLRTLRLRPLRLSRFEGMRVVNALLGAIPSIM
 NVLLVCLIFWLIFSIMGVNLFAGKFYHCINTTTGDRFDIEDVNNHTDCLKLIERNETA
 RWKNVKNFDFNVGFGYLSLLQVATFKGWM DIMYAAVDSRNVELQPKYEESSLYMYLFV
 IFIIFGSFFTLNLFIGVIIDNFNQKKFGGQDIFMTEEQKKYINAMKKLGSKKPQKP
 IPRPGNKFGQMVDFVTRQVFDISIMILICLMVTMMVETDDQSEYVTTILSRINLVF
 IVLFTGECVLKLI SLRHYYFTIGWNIFDFVVVILSIVGMFLAELIEKYFVSPTLFRVI
 RLARIGRILRLIKGAKGIRTLFALMMSLPALFNIGLLLFLVMFIYAI FGMSPNFAYVK
 REVGIDDMFN FETFGNSMICLFQITTSAGWDGLLAPILNSKPPDCDPKNVNPSSVKG
 DCGNPSVGIFFFVSYIIISFLVVNMVYIAVILENFSVATEESAEPLEDDFEMFYEVW
 EKFDPDATQFMEFEKLSQFAAALEPPLNLPQPNKLQLIAMDLPMVSGDRIHCLDILFA
 FTKRVLGESGEMDALRIQMEERFNASNPSKVSYPITTTTLKRQE EVSAV IQRAYRR
 HLLKRTVKQASFTYKNKIKGGANLLIKEDMIIDRINENSITEKTDLTMTAACPPSY
 DRVTKPIVEKHEQEKGKDEKAKGK"

ORIGIN

1	atggagcaaa	cagtgcctgt	accaccagga	cctgacagct	tcaacttctt	caccagagaa
61	tctcttgagg	ctattgaaag	acgcattgca	gaagaaaagg	caaagaatcc	caaaccagac
121	aaaaaagatg	acgacgaaaa	tggcccaaag	ccaaatagtg	acttggaagc	tggaaagaac
181	cttccattta	tttatggaga	cattcctcca	gagatgggtg	cagagccctt	ggaggacctg
241	gacccctact	atatcaataa	gaaaactttt	atagtattga	ataaagggaa	ggccatcttc
301	cgggttcagt	ccacctctgc	cctgtacatt	ttaactccct	tcaatcctct	taggaaaata
361	gctattaaga	ttttggtaca	ttcattattc	agcatgctaa	ttatgtgcac	tattttgaca
421	aactgtgtgt	ttatgacaat	gagtaaccct	cctgatttga	caaagaatgt	agaatacacc
481	ttcacaggaa	tatatacttt	tgaatcactt	ataaaaatta	ttgcaagggg	attctgttta
541	gaagatttta	ctttccttcg	ggatccatgg	aactggctcg	atttctactgt	cattacattt
601	gcgtacgtca	cagagtttgt	ggacctgggc	aatgtctcgg	cattgagaac	attcagagtt
661	ctccgagcat	tgaagacgat	ttcagtcatt	ccaggcctga	aaaccattgt	gggagccctg
721	atccagtctg	tgaagaagct	ctcagatgta	atgacctga	ctgtgttctg	tctgagcgta
781	tttgctctaa	ttgggctgca	gctgttcatt	ggcaacctga	ggaataaatg	tatacaatgg
841	cctcccacca	atgcttcctt	ggaggaacct	agtatagaaa	agaatataac	tgtgaattat
901	aatggtacac	ttataaatga	aactgtcttt	gagtttgact	ggaagtcata	tattcaagat
961	tcaagatata	attatttcct	ggagggtttt	ttagatgcac	tactatgtgg	aaatagctct
1021	gatgcaggcc	aatgtccaga	gggatatatg	tgtgtgaaag	ctggtagaaa	tcccaattat
1081	ggctacacaa	gctttgatac	cttcagttgg	gcttttttgt	ccttgtttcg	actaatgact
1141	caggacttct	gggaaaatct	ttatcaactg	acattacgtg	ctgctgggaa	aacgtacatg
1201	atattttttg	tattggtcat	tttcttgggc	tcattctacc	taataaattt	gatcctggct
1261	gtggtggcca	tggcctacga	ggaacagaat	caggccacct	tggagaagc	agaacagaaa
1321	gaggccgaat	ttcagcagat	gattgaacag	cttaaaaagc	aacaggaggc	agctcagcag
1381	gcagcaacgg	caactgcctc	agaacattcc	agagagccca	gtgcagcagg	caggctctca
1441	gacagctcat	ctgaagcctc	taagttgagt	tccaagagtg	ctaaggaaag	aagaaatcgg
1501	aggaagaaaa	gaaaacagaa	agagcagtct	ggtggggaag	agaaagatga	ggatgaattc
1561	caaaaatctg	aatctgagga	cagcatcagg	aggaaagggt	ttcgcttctc	cattgaaggg
1621	aaccgattga	catatgaaaa	gaggtactcc	tccccacacc	agtctttgtt	gagcatccgt
1681	ggctccctat	tttcaccaag	gcgaaatagc	agaacaagcc	ttttcagctt	tagagggcga

```
1741 gcaaaggatg tgggatctga gaacgacttc gcagatgatg agcacagcac ctttgaggat
1801 aacgagagcc gtagagattc cttgtttgtg ccccgacgac acggagagag acgcaacagc
1861 aacctgagtc agaccagtag gtcaccccgg atgctggcag tgtttccagc gaatgggaag
1921 atgcacagca ctgtggattg caatgggtgt gtttccttgg gaacaaccac tgaaactgaa
1981 atgagaaaaga gaaggtcaag ttctttccac gtttccatgg actttctaga agatccttcc
2041 caaaggcaac gagcaatgag tatagccagc attctaacaa atacagtaga agaacttgaa
2101 gaatccaggc agaaatgcc accctgttgg tataaatttt ccaacatatt cttaatctgg
2161 gactgttctc catattgggt aaaagtgaac catgttgtca acctggttgt gatggacca
2221 tttgttgacc tggccatcac catctgtatt gtcttaata ctcttttcat ggccatggag
2281 cactatccaa tgacggacca tttcaataat gtgcttacag taggaaactt ggttttctact
2341 gggatcttta cagcagaaat gtttctgaaa attattgcca tggatcctta ctattatttc
2401 caagaaggct ggaatatctt tgacggtttt attgtgacgc ttagcctggt agaacttga
2461 ctgcaccaat tgggaaggatt atctgttctc cgttcatttc gattgctgcg agttttcaag
2521 ttggcaaaat cttggccaac gttaaataat ctaataaaga tcatcggaac ttccgtgggg
2581 gctctgggaa atttaaccct cgtcttggcc atcatcgtct tcatttttgc cgtggtcggc
2641 atgcagctct ttggtaaaag ctacaaagat tgtgtctgca agatcgccag tgattgtcaa
2701 ctcccacgct ggcacatgaa tgacttcttc cactccttcc tgattgtgtt ccgctgtctg
2761 tgtggggagt ggatagagac catgtgggac tgtatggagg ttgctggtca agccatgtgc
2821 cttactgtct tcatgatggt catggtgatt ggaaacctag tggctctgaa tctctttctg
2881 gccttgcttc tgagctcatt tagtgagac aaccttgacg ccatgatga tgataatgaa
2941 atgaataatc tccaaattgc tgtggatagg atgcacaaag gagtagctta tgtgaaaaga
3001 aaaatatatg aatttattca acagtccttc attaggaac aaaagatttt agatgaaatt
3061 aaaccacttg atgatctaaa caacaagaaa gacagttgta tgtccaatca tacaacagaa
3121 attgggaaag atcttgacta tcttaaagat gtaaattgga ctacaagtgg tataggaact
3181 ggcagcagtg ttgaaaaata cattattgat gaaagtgatt acatgtcatt cataaacaac
3241 cccagtctta ctgtgactgt accaattgct gtaggagaat ctgactttga aaatttaaac
3301 acggaagact ttagtagtga atcggatctg gaagaaagca aagagaaact gaatgaaagc
3361 agtagctcat cagaaggtag cactgtggac atcggcgcac ctgtagaaga acagcccgtg
3421 gtggaacctg aagaaactct tgaaccagaa gcttgtttca ctgaaggctg tgtacaaaga
3481 ttcaagtgtt gtcaaataca tgtggaagaa ggcagaggaa aacaatggtg gaacctgaga
3541 aggacgtggt tccgaatagt tgaacataac tggtttgaga ccttcattgt tttcatgatt
3601 ctcccttagt gtggtgctct ggcatttgaa gatatatata ttgatcagcg aaagacgatt
3661 aagacgatgt tggaaatagc tgacaagggt ttcacttaca ttttcattct ggaaatgctt
3721 ctaaaaatgg tggcatatgg ctatcaaaca tatttcacca atgcctgggt ttggtggac
3781 ttcttaattg ttgatgttct attggtcagt ttaacagcaa atgccttggg ttactcagaa
3841 cttggagcca tcaaactctc caggacacta agagctctga gacctctaag agccttatct
3901 cgatttgaag ggatgagggt ggttgtgaat gcccttttag gagcaattcc atccatcatg
3961 aatgtgcttc tggtttgtct tatattctgg ctaattttca gcatcatggg cgtaaatttg
4021 tttgctggca aattctacca ctgtattaac accacaactg gtgacagggt tgacatcgaa
4081 gacgtgaata atcatactga ttgcctaaaa ctaatagaaa gaaatgagac tgctcgatgg
4141 aaaaatgtga aagtaaactt tgataatgta ggatttgggt atctctcttt gcttcaagtt
4201 gccacattca aaggatggat ggatataatg tatgcagcag ttgattccag aaatgtggaa
4261 ctccagccta agtatgaaga aagtctgtac atgtatcttt actttgttat tttcatcatc
4321 tttgggtcct tcttcacctt gaacctgttt attggtgtca tcatagataa tttcaaccag
4381 cagaaaaaga agtttggagg tcaagacatc tttatgacag aagaacagaa gaaatactat
4441 aatgcaatga aaaaattagg atcgaaaaaa ccgcaaaagc ctatacctcg accaggaaac
4501 aaatttcaag gaatggtctt tgacttcgta accagacaag tttttgacat aagcatcatg
4561 attctcatct gtcttaacat ggtcacatg atggtggaaa cagatgacca gagtgaatat
4621 gtgactacca tttgtcacg catcaatctg gtgttcattg tgctatttac tggagagtgt
4681 gtactgaaac tcatctctct acgccattat tattttacca ttggatggaa tatttttgat
4741 tttgtggttg tcattctctc cattgtagggt atgtttcttg ccgagctgat agaaaagtat
4801 ttcgtgtccc ctaccctgtt ccgagtgatc cgtcttgcta ggattggccg aatcctacgt
4861 ctgatcaaag gagcaaaggg gatccgcacg ctgctctttg ctttgatgat gtcccttctt
4921 gcgttgttta acatcggcct cctactcttc ctagtcatgt tcatctacgc catcttggg
4981 atgtccaact ttgcctatgt taagagggaa gttgggatcg atgacatgtt caactttgag
5041 acctttggca acagcatgat ctgcctattc caaattacaa cctctgctgg ctgggatgga
5101 ttgctagcac ccattctcaa cagtaagcca cccgactgtg accctaataa agttaaccct
5161 ggaagctcag ttaagggaga ctgtgggaac ccactgtgtg gaattttctt ttttgtcagt
5221 tacatcatca tatccttctt ggttgtggtg aacatgtaca tcgcggtcat cctggagaac
5281 ttcagtgttg ctactgaaga aagtgcagag cctctgagtg aggatgactt tgagatgttc
```

```
5341 tatgaggttt gggagaagtt tgatcccgat gcaactcagt tcatggaatt tgaaaaatta
5401 tctcagtttg cagctgcgct tgaaccgcct ctcaatctgc cacaacccaa caaactccag
5461 ctcatgtcca tggatttgcc catggtgagt ggtgaccgga tccactgtct tgatatctta
5521 tttgctttta caaagcgggt tctaggagag agtggagaga tggatgtctt acgaatacag
5581 atggaagagc gattcatggc ttccaatcct tccaagggtc cctatcagcc aatcactact
5641 actttaaaac gaaaacaaga ggaagtatct gctgtcatta ttcagcgtgc ttacagacgc
5701 caccttttaa agcgaactgt aaaacaagct tcctttacgt acaataaaaa caaatcaaa
5761 ggtggggcta atcttcttat aaaagaagac atgataattg acagaataaa tgaaaactct
5821 attacagaaa aaactgatct gaccatgtcc actgcagctt gtccaccttc ctatgaccgg
5881 gtgacaaagc caattgtgga aaaacatgag caagaaggca aagatgaaaa agccaaaggg
5941 aaataa
```

//

[Disclaimer](#) | [Write to the Help Desk](#)
[NCBI](#) | [NLM](#) | [NIH](#)

Nov 3 2003 07:26:36